IN THE UNITED STATES PATENT AND TRADEMARK OFFICE BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

Applicant:

Arnett et al.

Title:

SHOCK-RESISTANT AND

ENVIRONMENTALLY SEALED CONTAINER

Appl. No.:

09/689,001

Filing Date:

10/12/2000

Examiner:

S. Castellano

Art Unit:

3727

Confirmation 7673

Number:

BRIEF ON APPEAL

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Sir:

Under the provisions of 37 C.F.R. § 41.37, this Appeal Brief is being filed together with a credit card payment form in the amount of \$760 covering the 37 C.F.R. 41.20(b)(2) appeal fee for a small entity. If this fee is deemed to be insufficient, authorization is hereby given to charge any deficiency (or credit any balance) to the undersigned deposit account 19-0741.

REAL PARTY IN INTEREST

The real party in interest in this appeal is Underwater Kinetics, Inc., 13400 Danielson Street, Poway, California, USA.

RELATED APPEALS AND INTERFERENCES

This Appeal is not related to any other Appeals or Interferences.

STATUS OF CLAIMS

Claims 1-5, 10, 11, 13-25, 27 and 28 were previously canceled. Claims 6-9, 12, 26 and 29-31 are pending in the application.

Claims 6-9, 12, 26 and 29-31 are the subject of this appeal.

STATUS OF AMENDMENTS

Appellant believes the most recent claim amendments, submitted in conjunction with the response filed on September 27, 2006, have been entered in full.

SUMMARY OF CLAIMED SUBJECT MATTER

The embodiments of the present invention relate to shock-resistant and environmentally sealed containers. Specifically, embodiments of the present invention relate to a latch system for a container, where the latch system is designed to absorb shock, e.g., which may be experienced when the container being dropped. In this regard, relative movement between a first and second section of the container is absorbed, thereby preventing the latch from inadvertently opening.

In one embodiment, as recited in independent claim 6, a latch pin is mounted in a first section of the container (Page 5, lines 4-5; Page 6, line 14—Page 8, line 9; Figures 1-4 and 6-9), and a deflectable member is mounted in a latch (Page 7, line 23-Page 8, line 4; Figure 8). The latch is pivotally coupled to the latch pin so that the deflectable member is positioned between the latch pin and a portion of the latch (Page 6, lines 23-Page 7, line 2; Figures 6-8). In a closed position, the latch engages the second section (Page 7, lines 2-7; Page 7, line 23-Page 8, line 4; Figure 8). The deflectable member absorbs relative compression movement between the first section and the second section (Page 8, lines 1-4; Figure 8). In the embodiment illustrated in Figure 8, this is achieved by the deflectable member allowing the latch to move relative to the latch pin, while remaining engaged with the second portion.

In another embodiment, as recited in independent claim 26, a container is provided with a deflectable latch means for closing a container (Page 5, lines 4-5; Page 6, line 14–Page 8, line 9; Figures 1-4 and 6-9). Shock which may result from transporting of the container is absorbed by the deflectable latch means by absorbing the compression movement

between the sections of the container (Page 8, lines 1-4; Figure 8). A latch pin is mounted in one part of the container and a deflectable member mounted in a latch (Page 6, lines 20-22; Page 7, line 23-Page 8, line 4; Figure 8). The latch is pivotally coupled to the latch pin so that the deflectable member is positioned between the latch pin and a portion of the latch (Page 6, lines 23-Page 7, line 2; Figures 6-8). When the container is closed, the latch engages the second section of the container (Page 7, lines 2-7; Page 7, line 23-Page 8, line 4; Figure 8).

GROUNDS OF REJECTION TO BE REVIEWED ON APPEAL

The grounds of rejection to be reviewed on appeal are the Examiner's rejection of claims 6-9, 12, 26 and 29-31 under 35 U.S.C. § 103(a) as allegedly being unpatentable over each of four references individually. The four cited references are U.S. Patent No. 3,709,538 to Seitz et al. (hereinafter "Seitz"), U.S. Patent No. 4,838,586 to Henne (hereinafter "Henne"), U.S. Patent No. 4,861,078 to Munoz (hereinafter "Munoz") and U.S. Patent No. 4,109,819 to Kushman et al. (hereinafter "Kushman").

ARGUMENT

The outstanding issues for review on appeal are whether claims 6-9, 12, 26 and 29-31, directed to a latch system capable of absorbing compression movement between two sections of a container, are unpatentable, under 35 U.S.C. § 103(a), over four references, each cited individually as allegedly rendering the claims obvious.

It is respectfully submitted that the rejection of claims 6-9, 12, 26 and 29-31 under 35 U.S.C. § 103(a) as allegedly being unpatentable over any of the four cited references is in error since the Examiner has failed to establish a *prima facie* case of obviousness relative to any of the references, either individually or in combination.

In *In re Rijckaert*, 9 F.3d 1531, 1532, (Fed. Cir. 1993), the Federal Circuit outlined the burden on the PTO as follows:

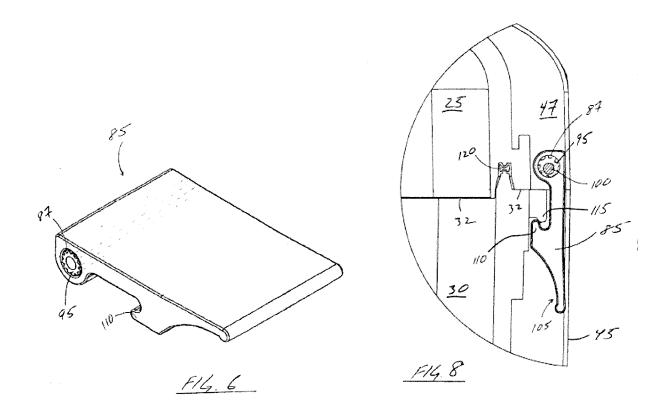
In rejecting claims under 35 U.S.C. 103, the examiner bears the initial burden of presenting a *prima facie* case of obviousness. *In re Oetiker*, 977 F.2d 1443, 1445, 24 U.S.P.Q.2d 1443, 1444 (Fed. Cir. 1992). Only if that burden is met, does the burden of coming forward with evidence or argument shift to the applicant. *Id.* "A *prima facie* case of obviousness is established when the teachings from the prior art itself would appear to have suggested the claimed subject matter to a person of ordinary skill in the art." *In re Bell*, 991 F.2d 781, 782, 26 U.S.P.Q.2d 1529, 1531 (Fed. Cir. 1993) (quoting *In re Rinehart*, 531 F.2d 1048, 1051, 189 U.S.P.Q. 143, 147 (CCPA 1976)). If the examiner fails to establish a *prima facie* case, the rejection is improper and will be overturned. *In re Fine*, 837 F.2d 1071, 1074, 5 U.S.P.Q.2d 1596, 1598 (Fed. Cir. 1988).

To establish a *prima facie* case of obviousness, three basic criteria must be met. First, there must be some reasonable suggestion or motivation to modify the prior art reference or

to combine reference teachings. Second, there must be a reasonable expectation of success of achieving the desired goals. Finally, the prior art references when combined must teach all the claim limitations. The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art, and not based on the Applicant's disclosure. *In re Vaeck*, 947 F.2d 488 (Fed. Cir. 1991).

This "TSM" test for obviousness was recently affirmed by the Supreme Court. KSR Int'l Co. v. Teleflex Inc., No. 04-1350, 550 U.S. _____, slip op. at 15 (2007). The KSR Court warned the fact finder to be aware of the distortion caused by hindsight bias and to be cautious of arguments reliant upon *ex post* reasoning. KSR, slip op. at 17. The KSR Court further admonishes that "rejections on obviousness grounds cannot be sustained by mere conclusory statements; instead, there must be some articulated reasoning with some rational underpinning to support the legal conclusion of obviousness." KSR, slip op. at 14, quoting In re Kahn, 441 F.3d 977, 988 (Fed. Cir. 2006).

As described below, in this instance, the prior art references, either individually or when combined, fail to teach all the claim limitations. Therefore, the test for obviousness is not met.



As described in the specification and illustrated in Figures 6 and 8 (reproduced above) of the present application, one embodiment of the invention includes a latch pin 100 mounted in a first section 25 of a container. A latch 85 is pivotally coupled to the latch pin 100, and a deflectable member (e.g., the bushing 95) is provided in the latch and is positioned between the latch pin 100 and a part of the latch. The deflectable member is positioned between the latch pin and a portion of the latch and is configured to absorb relative compression movement between the first section 25 and a second section 30 of the container when the latch is engaged to the second section 30.

In the embodiment illustrated in Figures 6 and 8, the bushing 95 deflects to absorb the relative movement between the latch and the latch pin. In the particular embodiment of

Figure 8, the bushing 95 includes a plurality of deflectable ribs which deflect to absorb the relative movement. The bushing 95 is clearly illustrated in Figure 8 in a deflected configuration (note the latch pin 100 off-center relative to the bushing 95).

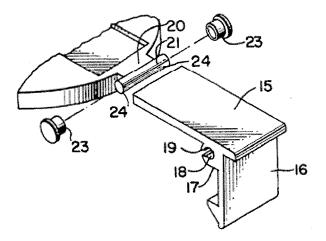
Thus, during an impact, the deflectable member (e.g., the bushing 95) absorbs the compression movement between the first and second sections of the container and prevents inadvertent unlatching of the container. Accordingly, independent claims 6 and 26 each recite a deflectable member "positioned between the latch pin and a portion of the latch" and "configured to absorb relative compression movement between the first section and the second section."

In the Final Office Action of November 17, 2006, the Examiner rejected claims 6-9, 12, 26 and 29-31 under 35 U.S.C. 103(a) as being allegedly unpatentable over Seitz, as well as over Henne, Munoz and Kushman, each individually. The Examiner has rejected the claims by alleging that the bushings disclosed in the prior art for merely providing rotational movement between two components also absorb compression movement. Applicant respectfully submits that there is no teaching or suggestion in any of the cited references of bushings or any other deflectable member capable of absorbing any movement such as relative compression movement.

I. The Bushings of Each Reference Merely Provide Rotational Movement

A. Seitz

Referring first to Seitz, the Office Action cites the bushing 23 shown in Figure 4 of Seitz as constituting a deflectable member. Figure 4 of Seitz is provided here for reference.



As apparent from Figure 4 of Seitz above, as well as from the description of the figure in Seitz, the bushing 23 of Seitz does not and cannot absorb any relative movement between the first and second section. The bushings 23 of Seitz merely function to retain the latch on the rod 21 and to allow rotational movement of the latch ("L-shaped member 14") relative to the rod 21. For example, Seitz discloses:

"The bushings 23 have outwardly radially extending flanges 25 which act to retain the L-shaped member in place on rod 21, while the bushings 23 are suitably retained to rod 21. The L-shaped member 14 pivots around the outer peripheral wall of bushings 23." Seitz, Page 2, lines 55-60.

There is no teaching that the bushings "deflect" in any manner and absorb any compression movement. Any absorption of compression movement in the device disclosed in Seitz is achieved by the coil spring 32, not the bushings 23.

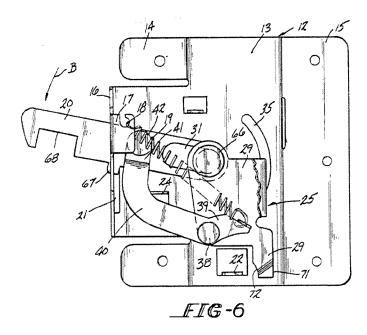
Further, unlike the bushings of the embodiment of the present invention, the bushings 23 of Seitz include no deflectable ribs or any other feature to absorb any relative movement. Rather, the bushings 23 of Seitz are solid bushings for facilitating rotational

movement of the latch 15. Therefore, the bushings 23 of Seitz are incapable of achieving the results of the "deflectable member" of the claims of the present application.

B. Henne and Munoz

While the latch of the present invention addresses the problems associated with a container which may experience shock during transport or other movement, Henne and Munoz each relate to latches for an oven door. Unlike a container, an oven door does not require transporting and is unlikely to experience the problems addressed by the present invention. Therefore, Henne and Munoz do not address such problems and, accordingly, do not disclose the solutions of the present invention.

Henne and Munoz disclose an oven door latch having a latch arm 20 which pivots about a pin 30. Figure 6 of Henne is representative of the two references and is reproduced below:



As apparent from the figure above, a bushing 66 is provided to facilitate the pivoting rotation of the latch arm 20. The Office Action alleges that the bushing 66 of Henne and Munoz constitutes a deflectable member, as recited in the pending claims. However, as in the case of Seitz, the bushings 66 of Henne and Munoz do not and cannot absorb any relative movement between a first and second section. The bushings disclosed in Henne and Munoz merely function to retain another component in a pre-determined position and facilitate rotational movement. For example, Henne and Munoz each disclose:

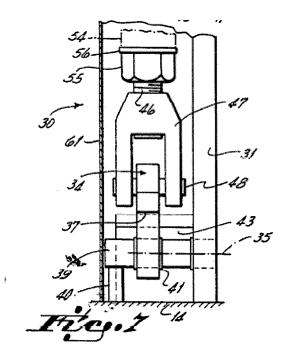
"rotation of handle 31 will then cause latch arm 20 to move on bushing 66" Henne, col. 4, lines 18-20 and Munoz, col. 3, lines 55-56.

Further, as in the case of Seitz, the bushing 66 of Henne and Munoz include no deflectable ribs or any other feature to absorb any relative movement but are, instead, solid bushings. Thus, the bushings 66 of Henne and Munoz are also incapable of absorbing any relative movement.

C. Kushman

Kushman discloses a clamp for a vent structure. As in the case of Henne and Munoz, the subject matter of Kushman does not require transporting. Since vent structures are unlikely to experience the problems associated with portable containers, Kushman does not address such problems and, accordingly, does not disclose the solutions of the present invention.

Figure 7 of Kushman is representative of the disclosure of Kushman and is reproduced below:



The clamp disclosed in Kushman has a latch member 34 rotating about an axle 39. A bearing or bushing 41 is provided to facilitate the pivoting rotation of the latch arm 20. See Kushman, Figure 7. The Office Action alleges that the bushing 41 of Kushman constitutes a deflectable member. Again, contrary to the Examiner's assertions, the bushing 41 of Kushman does not and cannot absorb any relative movement. The bushing 41 of Kushman merely facilitates rotational movement between the latch arm 20 and the axle 39. For example, Kushman discloses:

"A bearing or bushing 41 may be provided to take the relative rotation between latch member 34 and axle 39 (see FIG. 7)." Kushman, col. 4, lines 50-52.

Additionally, as in the case of the other three references, the bushing 41 of Kushman includes no feature, such as the deflectable ribs of the embodiment of the invention illustrated in Figure 8 of the present application, to absorb any relative movement. Rather, the

bushing 41 of Kushman is a solid bushing. Thus, as in the case of Seitz, Henne and Munoz, Kushman also discloses a bushing 41 that is incapable of absorbing any relative movement.

Therefore, each of the references, fails to teach or suggest at least a deflectable member configured to absorb relative compression movement, as recited in independent claims 6 and 26.

II. Official Notice Was Inappropriately Taken by the Examiner

In support of the rejection of the claims, in the Office Action dated March 30, 2005, the Examiner took Official Notice of "plastic, rubber and metal as well known materials for bushing." Appellant notes that the Examiner has not provided any documentary evidence to support this conclusion.

"It would not be appropriate for the examiner to take official notice of facts without citing a prior art reference where the facts asserted to be well known are not capable of instant and unquestionable demonstration as being well-known." M.P.E.P. § 2144.03(A).

In the present case, the Official Notice taken by the Examiner is clearly inappropriate. Without evidentiary support, it is certainly questionable as to what materials are available and commonly known for use in bushings.

III. Even if Official Notice Was Appropriate, Official Notice Fails to Render Claims Obvious

Even if it is common knowledge that various materials such as plastic, rubber and metal are well known materials for bushings, such common knowledge does not render the

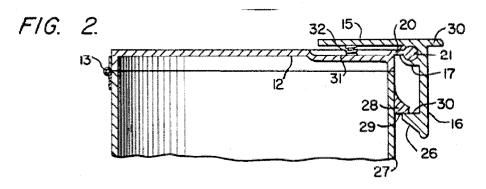
claims unpatentable. In support of the rejections, the Examiner argues that "[i]t would have been obvious to provide either plastic, rubber or metal as the material of the bushing in order to provide a material with the specific quality or qualities desired" Office Action dated November 17, 2006, page 3.

In explicating the correct standard for the TSM test, the Court in the recent KSR decision reaffirmed previous holdings that an invention "is not proved obvious merely by demonstrating that each of its elements was, independently, known in the prior art." KSR, slip op. at 14.; see also, In re Rouffet, 149 F.3d 1350, 1357, 47 USPQ2d 1453, 1457 (Fed. Cir. 1998). Furthermore, the Court warned the factfinder to be aware of the distortion caused by hindsight bias and to be cautious of arguments reliant upon *ex post* reasoning. KSR, slip op. at 17.

There is no basis for combining the alleged common knowledge with any of the cited references without the benefit of hindsight. None of the cited references address the problems solved by the present invention. Specifically, none of the references relate to containers capable of resisting shock, such as from being dropped, and maintaining a secure latch. The latches disclosed by Henne, Munoz and Kushman relate to stationary objects (e.g., ovens) and do not require absorption of any shocks. Further, each of the cited references merely disclose the function of the bushings as facilitating rotational movement, not absorption of relative movement. Accordingly, neither the alleged common knowledge nor the cited references provide any motivation to combine the teachings of the prior art. It would not be obvious to one of ordinary skill in the art to combine the disclosures of Henne, Munoz and/or Kushman

(unrelated to shock-resistant latches) with the alleged common knowledge to produce a deflectable member such as a bushing capable of absorbing compression movement.

Only Seitz even suggests a latch having any flexibility. In order to provide this flexibility, Seitz actually teaches away from the solution of the present invention. Rather than teaching or suggesting a bushing capable of absorbing compression movement, as illustrated in Figure 2 of Seitz (reproduced below), Seitz discloses a spring 32 to bias the horizontal leg 15 upward. See also Seitz, col. 3, lines 8-9. Therefore, it would not be obvious to one of ordinary skill in the art to combine the teaching of Seitz with the alleged common knowledge.



Since the absorption of compression movement is not achieved by the bushing of Seitz, there is no motivation to combine the alleged common knowledge of the various materials for bushings with the disclosure of Seitz to achieve the latch of the present invention.

Thus, since none of the references, either alone or in combination, teach or suggest one or more limitations of the pending independent claims, the test for obviousness is not met. The Office Action dated November 17, 2006, fails to establish a *prima facie* case of obviousness.

CONCLUSION

The pending claims of the present application recite patentable subject matter and are in condition for allowance. The rejections made by the Examiner should be withdrawn.

CLAIMS APPENDIX

- 1-5. (Canceled)
- 6. (Previously Presented) A latch system for a container, the container including a first section and a second section, the latch system comprising:
 - a latch pin mounted in the first section; and
- a deflectable member mounted in a latch, with the latch pivotally coupled to the latch pin so that the deflectable member is positioned between the latch pin and a portion of the latch;

wherein the latch is structured to removably engage the second section, and the deflectable member is configured to absorb relative compression movement between the first section and the second section.

- 7. (Previously Presented) The latch system of claim 6, wherein the deflectable member is structured to resist relative rotational movement between the latch and the latch pin.
- 8. (Original) The latch system of claim 6, wherein the deflectable member is structured to provide a means for adjusting the force required to pivot the latch about the latch pin.
- 9. (Original) The latch system of claim 6, wherein the deflectable member is a bushing.
 - 10. (Canceled)
 - 11. (Canceled)
- 12. (Original) The latch system of claim 6, wherein the latch system secures the first section against the second section so that the container is substantially waterproof and substantially airtight.
 - 13-25. (Canceled)

26. (Previously Presented) A container including a first section and a second section, the container comprising

deflectable latch means for releaseably coupling the first section to the second section and for absorbing relative compression movement between the first and second sections when the first and second sections are coupled together, wherein the deflectable latch means comprises

a latch pin mounted in the first section; and

a deflectable member mounted in a latch, with the latch pivotally coupled to the latch pin so that the deflectable member is positioned between the latch pin and a portion of the latch;

wherein the latch is structured to removably engage the second section, and the deflectable member is configured to absorb relative compression movement between the first section and the second section.

27-28. (Cancelled)

- 29. (Previously Presented) The latch system of claim 6, wherein the deflectable member is comprised of a material selected from the group consisting of plastics and rubbers.
- 30. (Previously Presented) The latch system of claim 6, wherein said deflectable member is comprised of a metal.
- 31. (Previously Presented) The latch system of claim 6, wherein the deflectable member is configured to absorb relative compression movement between the first section and the second section by absorbing relative movement between the latch pin and the latch.

EVIDENCE APPENDIX

None.

RELATED PROCEEDINGS APPENDIX

None.

Respectfully submitted,

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